

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS

REGULATION NO. 100

5 CCR 1003-2

100.1 AUTHORITY AND PURPOSE

100.1.1 Authority

This regulation is promulgated pursuant to the sections 25-9-101 through 110, C.R.S. and in particular section 25-9-101, C.R.S.

100.1.2 Article 9 of Title 25, C.R.S., requires that every water treatment facility, domestic or industrial wastewater treatment facility, wastewater collection system and water distribution system be under the supervision of a certified operator, holding a certificate in a class equal to or higher than the class of the facility or system.

Certification under this statute is available to all persons who meet the minimum qualifications of a given classification as described in section 100.9. Operators are encouraged to apply for certification in the highest classification consistent with their qualifications.

100.2 DEFINITIONS

~~(1) "BAG OR CARTRIDGE FILTRATION" means a filtration system consisting of a fixed filter housing into which flexible (bag) or rigid (cartridge) filters are inserted. Both bag and cartridge filters are disposable and cannot be backwashed or re-used.~~

~~(21) "BOARD" means the Colorado Water and Wastewater Facility Operators Certification Board or its designee created by section 25-9-103, C.R.S.~~

~~(32) "CERTIFICATE" means the written document certificate of competency issued by the Board or its designee stating that the person-operator named thereon has met the requirements for operating the specified classification of facility or system the certification program.~~

~~(43) "CERTIFIED OPERATOR" means the person who has responsibility for the operation of any water and wastewater facility and is certified in accordance with the provisions of this regulation. For purposes of this regulation, "responsibility for the operation" means making process control and/or system integrity decisions about water quality or quantity that may affect public health or the environment. This operator must be certified at a level equal to or higher than the classification of the facility they are operating.~~

~~(54) "CLASSIFICATION OF A WATER OR WASTEWATER FACILITY" means the level of operational complexity and/or size of a water or wastewater facility as determined by the Division.~~

- ~~(6) “COLORADO DISCHARGE PERMIT SYSTEM REGULATION (5 CCR 1002-61)” means the regulation promulgated by the Colorado Water Quality Control Commission in order to ensure the implementation of the Colorado Water Quality Control Act (Title 25, Article 5, sections 501 through 505, Colorado Revised Statutes) which are designated to be in conformity with that act and with the federal Clean Water Act.~~
- ~~(7) “COLORADO PRIMARY DRINKING WATER REGULATIONS (5 CCR 1003-1)” means the regulation promulgated by the Colorado Water Quality Control commission in order to ensure the safety of public drinking water supplies and to enable the State of Colorado to assume responsibility for enforcing the standards established by the federal Safe Drinking Water Act as amended.~~
- ~~(8) “COMMUNITY WATER SYSTEM” means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.~~
- ~~(9) “CONVENTIONAL FILTRATION TREATMENT” means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.~~
- (105) “DEPARTMENT” means the Colorado Department of Public Health and Environment.
- ~~(11) “DIRECT FILTRATION TREATMENT” means a series of processes including coagulation and filtration, but excluding sedimentation, resulting in substantial particulate removal.~~
- (126) “DIVISION” means the Water Quality Control Division within the Colorado Department of Public Health and Environment.
- ~~(137) “DOMESTIC WASTEWATER TREATMENT FACILITY” means any facility or group of units used for the treatment of domestic wastewater or for the reduction and handling of solids and gases removed from such wastes, whether or not such facility or group of units is discharging into state waters. “Domestic wastewater treatment facility” specifically excludes individual sewage disposal on-site wastewater treatment systems.~~
- (148) “INDUSTRIAL WASTEWATER TREATMENT FACILITY” means any facility or group of units used for the pretreatment, treatment, or handling of industrial waters, wastewater, reuse water, and wastes that are discharged into state waters. “Industrial wastewater treatment facility” includes facilities that clean up contaminated ground water or spills; except that such term does not include facilities designed to operate for less than one year or facilities with in-situ discharge.
- ~~(15) “NON-COMMUNITY WATER SYSTEM” means a public water system that is not a community water system.~~
- ~~(16) “NON-TRANSIENT NON-COMMUNITY WATER SYSTEM” means a public water system that is not a community water system and that regularly serves at least 25 of the same individuals for over 6 months per year.~~
- (179) “OPERATOR” means any person who performs or supervises activities and/or tasks pertinent to controlling the operation of a water or wastewater facility. An operator may or may not hold a certificate.
- ~~(18) “OPERATOR IN RESPONSIBLE CHARGE” means the person designated by the owner of the water or wastewater facility to be the certified operator(s) who has ultimate~~

responsibility for decisions regarding the daily operational activities of the facility that will directly impact the quality and/or quantity of drinking water, treated wastewater, or treated effluent.

~~(19) "PASSIVE WASTEWATER TREATMENT" means treatment in which chemical, mechanical, or biological treatment techniques are not utilized.~~

~~(2010)~~ "PLANT DESIGN FLOW" means the maximum flow rate (water) or the hydraulic capacity (wastewater) approved for a water or wastewater treatment facility by the Division.

~~(21) "PRIMARY DRINKING WATER REQUIREMENT" means any of the set of enforceable Maximum Contaminant Levels for drinking water regulated under the Colorado Primary Drinking Water Regulations (5 CCR 1003-1).~~

~~(22) "PUBLIC WATER SYSTEM" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals, at least 60 days out of the year. Such term includes:~~

~~(A) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such systems, and~~

~~(B) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such systems.~~

~~Such term does not include any "special irrigation district." A public water system is either a "community water system" or a "non-community water system."~~

~~(23) "RESPONSIBLE PERSON" means an individual, designated by the owner of a Class 2 industrial wastewater facility, who is specifically responsible for overseeing the facility's operation and for ensuring compliance with the facility's discharge permit and who receives relevant annual training with respect to these duties including, as appropriate, specific measures used to meet effluent limits, monitoring, inspection, planning, reporting, and documentation requirements.~~

~~(24) "SECONDARY DRINKING WATER STANDARD" means any of the set of Secondary Contaminant Level guidelines for drinking water regulated under the Colorado Primary Drinking Water Regulations (5 CCR 1003-1)~~

~~(2511)~~ "TRAINING UNIT" means the credit given for an increment of training approved as applicable to the fulfillment of certification renewal requirements. Ten contact hours shall be required to equal one training unit. A "contact hour" means a classroom or supervised hour of attendance or hour of participation recognized by the Board as a training unit.

~~(26) "TRANSIENT NON-COMMUNITY WATER SYSTEM" means a non-community public water system that does not regularly serve at least 25 of the same individuals for over six months per year.~~

~~(2712)~~ "VALIDATED EXAMINATION" means an examination that is independently reviewed by subject matter experts to ensure that the examination is based on a job analysis and is related to the classification of the system or facility.

~~(2813)~~ "WASTEWATER COLLECTION SYSTEM" means a system of pipes, conduits, and associated appurtenances that transports domestic wastewater from the point of entry to

120 a domestic wastewater treatment facility. The term does not include collection systems
121 that are within the property of the owner of the facility.

122 (~~29~~14) "WASTEWATER TREATMENT FACILITY" means either a domestic wastewater
123 treatment facility or an industrial wastewater treatment facility.

124 (~~30~~15) "WATER AND/OR WASTEWATER FACILITY" means a water treatment facility, domestic
125 wastewater treatment facility, industrial wastewater treatment facility, water distribution
126 system, or wastewater collection system.

127 (~~34~~16) "WATER DISTRIBUTION SYSTEM" means any combination of pipes, tanks, pumps, or
128 other facilities that delivers water from a source or treatment facility to a consumer.

129 (~~32~~17) "WATER TREATMENT FACILITY" means the facility or facilities within the water
130 distribution system that can alter the physical, chemical, or bacteriological quality of the
131 water.

132 100.3 **ADMINISTRATIVE FUNCTIONS**

133 100.3.1 In carrying out its responsibilities to administer the operator certification program
134 pursuant to Article 9 of Title 25, C.R.S., the Board or its designee may carry out any of
135 the following duties, including but not limited to:

- 136 (a) administering the operator certification program;
- 137 (b) collecting program fees for administration of the operator certification program;
- 138 (c) administering validated examinations for operator certification;
- 139 (d) maintaining records of ~~certified~~ operators holding a certificate;
- 140 (e) maintaining records of water and wastewater facilities;
- 141 (f) notifying operators of expiration of certification;
- 142 (g) providing information on accredited training programs and training requirements;
- 143 (h) preparing and/or furnishing validated examinations and related materials;
- 144 (i) collecting fees for examinations and administration of examinations;
- 145 (j) setting times, dates, and places for holding examinations;
- 146 (k) ensuring the accurate and unbiased grading of examinations;
- 147 (l) evaluating work experience of applicants;
- 148 (m) evaluating and approving training units for renewal of certification;
- 149 (n) evaluating and approving requests for certification based upon reciprocity;
- 150 (o) recording results of examinations;
- 151 (p) notifying applicants of their examination results;

- 152 (q) recommending issuance of certificates or issuing certificates in accordance with
153 Board criteria;
- 154 (r) conducting failed exam reviews; or
- 155 (s) preparing and distributing annual reports.

156 100.3.2 Each operator holding a certificate shall provide to the Board or its designee his or her
157 current mailing address, telephone number, and email address (if available) and shall
158 update this information within 30 days of a change.

159 **100.4 WATER TREATMENT FACILITY CLASSIFICATION**

160 100.4.1 Water treatment facilities shall be classified by the Division in accordance with the
161 following four classes; Class D, Class C, Class B, or Class A. Class A is the highest level
162 of classification and Class D is the lowest level of classification. The Division may make
163 changes in classification in accordance with the needs created by particular complexities
164 of any specific water treatment facility based on consideration of facility specific factors,
165 including, but not limited to:

- 166 (a) special features of design;
- 167 (b) source of supply which make operation more difficult than normal; or
- 168 (c) a combination of such conditions.

169 100.4.2 Table – Criteria for Water Treatment Facility Classes A, B, C, and D

Description of the Facility	Plant Design Flow (in MGD)			
Community Water Systems, Non-Transient Non-Community Water systems, and Transient Non-Community Water Systems. Description of the Facility	Below 2	2 – 5	5.01 – 9.99	10 or more
<u>Ground Water Systems</u>	.	.	.	.
(a) Ground water source with no treatment or with no additional treatment beyond chlorine disinfection.	D	D	C	B
(b) Ground water source with ultraviolet or ozone disinfection.	D	C	C	B
(c) Ground water source utilizing chemical addition and/or a treatment technology (for example, ion exchange, reverse osmosis, membrane filters, or activated carbon) for the specific purpose of meeting secondary drinking water standards.	C	C	B	B

<u>All Water Systems</u>	.	.	.	.
(d) Any source utilizing bag or cartridge filtration to comply with primary drinking water requirements <u>standards</u> ¹ . <u>"BAG OR CARTRIDGE FILTRATION" means a filtration system consisting of a fixed filter housing into which flexible (bag) or rigid (cartridge) filters are inserted. Both bag and cartridge filters are disposable and cannot be backwashed or re-used.</u>	D	--	--	--
(e) Any source utilizing a treatment technology (for example, slow sand, diatomaceous earth, membrane filtration, ion exchange, activated carbon filtration, reverse osmosis) with disinfection to comply with primary drinking water requirements and which is not listed in sections 100.4.2(d) or 100.4.2(f) of this regulation.	C	B	B	A
(f) Any source utilizing conventional or direct filtration with disinfection to comply with primary drinking water requirements <u>standards</u> . <u>"Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal. "Direct filtration treatment" means a series of processes including coagulation and filtration, but excluding sedimentation, resulting in substantial particulate removal.</u>	B	A	A	A
<u>Chemical Addition</u>	.	.	.	.
(g) Any source utilizing chemical treatment for the specific purpose of complying with secondary drinking water standards ² .	C	C	B	B
(h) Any source utilizing additional chemical treatment, with the exception of corrosion control in the distribution system and disinfection for the specific purpose of complying with primary drinking water requirements <u>standards</u> ¹ .	B	B	A	A
(i) Any source utilizing chemical treatment for the specific purpose of controlling corrosion (i.e., lead and copper) in the distribution system.	C	C	B	B
(j) Any source utilizing fluoridation.	C	C	C	B
<u>Other</u>	.	.	.	.
(k) Water vending machines connected to a public water system that does not currently meet primary	-C	C-(all sizes)	-C	-C

drinking water requirements <u>standards</u> ¹ .				
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¹ "Primary drinking water standard" means any of the set of enforceable maximum contaminant levels for drinking water regulated under the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1.

² "Secondary drinking water standard" means any of the set of secondary maximum contaminant levels for drinking water regulated under the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1. These standards are not enforceable, but are intended as guidelines.

100.4.3 The classification of any water treatment facility may be changed at the discretion of the Division by reason of changes in any condition or circumstance on which the classification was predicated.

100.4.4 Any drinking water treatment facility that utilizes a combination of two or more of the treatment processes described in section 100.4.2 of this regulation shall be classified in accordance with the highest level of treatment process utilized.

100.4.5 Section 100.4 applies to public water systems subject to the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1.

100.5 DOMESTIC WASTEWATER TREATMENT FACILITY CLASSIFICATION

100.5.1 Domestic wastewater treatment facilities shall be classified by the Division in accordance with the following four classes: Class D, Class C, Class B, or Class A. Class A is the highest level of classification and Class D is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific domestic wastewater treatment facility based on consideration of facility specific factors, including, but not limited to:

- (a) design features or other characteristics that make the facility more difficult to operate than usual;
- (b) facility design flow;
- (c) the character and volume of wastes to be treated;
- (d) the facility's design being approved under the Department's variance procedure;
- (e) a waste unusually difficult to treat;
- (f) flow conditions, use classifications and/or water quality standards assigned to the waters receiving the treated effluent that require an unusually high degree of plant operational control in order to meet permit conditions; or
- (g) combinations of such conditions or circumstances.

100.5.2 Table – Criteria for Domestic Wastewater Treatment Facility Classes A, B, C, and D

Description of the Facility	Plant Design Flow (in MGD)				
	Below 0.5	0.5-1.00	1.01-2.00	2.01-4.00	Above 4.00
(a) Waste stabilization ponds, including aerated and non-	D	C	C	B	B

aerated types					
(b) Trickling filter or rotating biological contactor	C	C	B	B	A
(c) Extended aeration process sequencing batch reactors designed to operate in the extended aeration loading range.	C	B	B	B	A
(d) All other activated sludge processes and extended aeration where used beyond secondary treatment (i.e., nitrification) and chemical and/or physical processes providing a high degree of treatment other than polishing ponds.	B	B	B	B	A
(e) Recirculating sand filtration	D	C	C	C	C
(f) Wetlands used as a part of the water treatment process	Will be classified in alignment with the last treatment process prior to release of the effluent into the wetland for further treatment.				

100.5.3 The classification of any domestic wastewater treatment facility may be changed at the discretion of the Division by reason of changes in any condition or circumstance on which the classification was predicated.

100.5.4 Any domestic wastewater treatment facility that utilizes a combination of two or more of the treatment processes described in section 100.5.2 of this regulation shall be classified in accordance with the highest level of treatment process utilized.

100.6 INDUSTRIAL WASTEWATER TREATMENT FACILITY CLASSIFICATION

100.6.1 Classification

(a) Pursuant to section 25-9-104(4), C.R.S., industrial wastewater treatment facilities shall be classified by the Board as Class 1 or Class 2 facilities. Class 2 facilities shall be exempt from the requirement to operate under the supervision of a certified operator. Facilities not classified by the Board as Class 2 facilities shall be classified as Class 1 facilities.

(b) Class 2 Facilities

(i) Class 2 facilities shall include facilities:

~~(A) — which discharge only pursuant to an industrial stormwater permit, a construction stormwater permit, or a municipal stormwater permit;~~

~~(B)~~ (A) which discharge pursuant to a ~~Colorado Discharge Permit System~~ general industrial permit for Water Treatment Plant Wastewater Discharge, provided that the permitted water treatment facility is under the supervision of a properly certified water treatment facility operator who is specifically responsible for overseeing the facility's operation and

223 for ensuring compliance with the facility's discharge permit, including
224 monitoring and reporting requirements; or

225 ~~(CB)~~ which discharge pursuant to an industrial stormwater permit, a
226 construction stormwater permit, a municipal stormwater permit, or a
227 Colorado Discharge Permit System-general industrial permit for the
228 following: Construction Dewatering Activities; Aquatic Animal Production
229 with Continuous an Intermittent Discharge; Sand and Gravel Process
230 Water and Stormwater; Minimal Industrial Discharge; Subterranean
231 Dewatering and Well Development; Hydrostatic Testing of Pipelines,
232 Tanks and Similar Vessels; Non-Contact Cooling Water; Pesticides; or
233 Commercial Washing of Outdoor Structures that meet both of the
234 following conditions:

235 (I) the quality of the wastewater discharged is such that discharge
236 permit limits can be met utilizing only passive treatment,
237 treatment in which chemical, mechanical, or biological treatment
238 techniques are not utilized, or no treatment; and

239 (II) the facility has designated a responsible person who is
240 specifically responsible for overseeing the facility's operation and
241 for ensuring compliance with the facility's discharge permit,
242 including monitoring and reporting requirements. "Responsible
243 person" means an individual, designated by the owner of a Class
244 2 industrial wastewater facility, who is specifically responsible for
245 overseeing the facility's operation and for ensuring compliance
246 with the facility's discharge permit and who receives relevant
247 annual training with respect to these duties including, as
248 appropriate, specific measures used to meet effluent limits,
249 monitoring, inspection, planning, reporting, and documentation
250 requirements.

251 (ii) If at any time the facility does not meet the conditions of section 100.6.1(b)(i), the
252 facility must notify the Division, in writing, and begin operating under the
253 supervision of ~~an appropriately~~-certified operator within 30 days of the change in
254 operations.

255 ~~(iii) The Board has the authority to reclassify any facility if the facility fails to comply~~
256 ~~with the requirements of its discharge permit or if the facility's operational~~
257 ~~practices result in a direct, negative impact on the public health or the~~
258 ~~environment.~~

259 ~~(iviii)~~ A facility which discharges pursuant to either an individual industrial wastewater
260 discharge permit or a general industrial permit not listed in 100.6.1(b)(i) above
261 may request classification by the Board as a class 2 facility.

262 (A) Considering the criteria in sections 25-9-104(4)(a) through (d), C.R.S.,
263 the Board may approve class 2 classification for such a facility where it
264 determines that the facility has demonstrated that:

265 (I) the quality of the wastewater discharged is such that discharge
266 permit limits can be met utilizing only passive treatment,
267 treatment in which chemical, mechanical, or biological treatment
268 techniques are not utilized, or no treatment, and

269 (II) the facility has designated a responsible person who is
270 specifically responsible for overseeing the facility's operation and
271 for ensuring compliance with the facility's discharge permit,
272 including monitoring and reporting requirements. "Responsible
273 person" means an individual, designated by the owner of a Class
274 2 industrial wastewater facility, who is specifically responsible for
275 overseeing the facility's operation and for ensuring compliance
276 with the facility's discharge permit and who receives relevant
277 annual training with respect to these duties including, as
278 appropriate, specific measures used to meet effluent limits,
279 monitoring, inspection, planning, reporting, and documentation
280 requirements.

281 (B) The Division shall evaluate a written request from the facility and shall
282 provide the Board with a classification recommendation based upon the
283 criteria in part (A) of this subsection and upon the criteria listed in
284 sections 25-9-104(4)(a) through (d), C.R.S.

285 (C) The Board shall approve or deny such classification requests at an
286 adjudicatory hearing to be held at a regularly scheduled Board meeting.

287 (D) Each facility classified as a class 2 facility under the authority of this
288 subsection shall re-certify in writing, by December 31st of each year, that
289 the conditions in part (A) of this subsection continue to be met.

290 (Eiv) The Board has the authority to reclassify any facility if the facility fails to comply
291 with the requirements of its discharge permit or if the facility's operational
292 practices result in a direct, negative impact on the public health or the
293 environment.

294 (c) Class 1 Industrial Wastewater Treatment Facilities.

295 Class 1 industrial wastewater treatment facilities shall be further classified by the Division
296 in accordance with the following four classes: Class D, Class C, Class B, or Class A.
297 Class A is the highest level of classification and Class D is the lowest level of
298 classification. The Division may make changes in classification in accordance with the
299 needs created by particular complexities of any specific industrial wastewater treatment
300 facility based on consideration of facility specific factors, including, but not limited to:

301 (a) design features or other characteristics that make the plant more difficult to
302 operate;

303 (b) treatment of a waste that is unusually difficult to process adequately;

304 (c) flow conditions, use classifications and/or water quality standards assigned to the
305 waters receiving the treated effluent requiring an unusually high degree of plant
306 operation control in order to meet permit conditions; or

307 (d) any combination of the above conditions or circumstances.

308 100.6.2 Table – Criteria for Industrial Wastewater Treatment Facility Classes A, B, C, and D
309 (under the "Class 1" Category)

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CLASSIFICATION	TREATMENT PROCESS ¹
Class A	Chemical conversion (e.g., cyanide destruction, hexavalent chromium reduction); Ion exchange; Electrolytic conversion; Filtration by reverse osmosis.
Class B	Chemical coagulation and flocculation; adsorptive Adsorptive processes (e.g., activated carbon); Ultrafiltration; Microfiltration; Chemical precipitation; Suspended, fixed, or a combination of biological processes (e.g., activated sludge, trickling filters, rotating biological contactors).
Class C	Standard clarification (including waste ponds for settling that regularly utilize chemical addition); Filtration (e.g., mixed media, pressure); Neutralization; Solids Dewatering (e.g., sand or surfaced drying beds, mechanical); Airstripping; Sludge Digestion.
Class D	Particulate settling ponds; Simple gravity flow filtration without chemical addition; Physical water/gas separation without chemical addition; Cooling water discharge without chemical addition.

¹ Treatment processes are listed as examples and are not all inclusive.

100.6.3 The classification of any Class 1 industrial wastewater treatment facility may be changed at the discretion of the Division by reason of changes in any condition or circumstances on which the classification was predicated.

100.6.4 Any Class 1 industrial wastewater treatment facility that regularly utilizes a combination of two or more of the treatment processes described in section 100.6.4(a)2 of this regulation (~~Table~~) shall be classified in accordance with the highest level of treatment process utilized.

100.7 WATER DISTRIBUTION SYSTEM CLASSIFICATION

100.7.1 Water distribution systems shall be classified by the Division in accordance with the following four classes: Class 1, Class 2, Class 3 or Class 4. Class 4 is the highest level of classification and Class 1 is the lowest level of classification. The Division may make changes in classification in accordance with the needs created by particular complexities of any specific water distribution system based on consideration of system specific factors, including, but not limited to:

- (a) unusual factors affecting the complexity of transmission, mixing of sources, or potential public health hazards;
- (b) size and/or length of the system's water mains;

- 329 (c) whether or not there are automatic control valves, including but not limited to,
330 pressure reducing or altitude valves;
- 331 (d) number and/or size and/or types of meters;
- 332 (e) existence of storage tanks in the system;
- 333 (f) existence of multiple pressure zones;
- 334 (g) maximum pressure in the system;
- 335 (h) existence of booster stations;
- 336 (i) number of service connections; or
- 337 (j) quantity of water distributed.

338 100.7.2 Table – Criteria for Water Distribution System Classes 1, 2, 3, and 4

<u>CLASS</u>	<u>POPULATION SERVED</u>
Class 1	3,300 or Less
Class 2	3,301 - 25,000
Class 3	25,001 – 100,000
Class 4	Over 100,000

339 100.7.3 The classification of any water distribution system may be changed at the discretion of
340 the Division by reason of changes in any condition or circumstances on which the
341 classification was predicated.

342 100.7.4 Section 100.7 only applies to distribution systems that serve a ~~public~~-water system
343 subject to the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1.

344 100.7.5 An entire distribution system that falls within the jurisdiction of the Water Well
345 Construction and Pump Installation Contractors Act, C.R.S. 37-91-101, et seq., shall be
346 considered to have a “de minimus” distribution system, not subject to the requirement of
347 supervision by a certified distribution system operator.
348
349

350 100.8 **WASTEWATER COLLECTION SYSTEM CLASSIFICATION**

351 100.8.1 Wastewater collection systems shall be classified by the Division in accordance with the
352 following four classes: Class 1, Class 2, Class 3 or Class 4. Class 4 is the highest level
353 of classification and Class 1 is the lowest level of classification. The Division may make
354 changes in classification in accordance with the needs created by particular complexities
355 of any specific wastewater collection system based on consideration of facility specific
356 factors, including, but not limited to:

- 357 (a) any unusual factors affecting the complexity of collection;

- (b) whether there is the potential for mixing of sources; or
- (c) the presence of any potential public health hazards.

100.8.2 Table – Criteria for Wastewater Collection System Classes 1, 2, 3, and 4

CLASS	POPULATION SERVED
Class 1	3,300 or Less
Class 2	3,301 - 25,000
Class 3	25,001 – 100,000
Class 4	Over 100,000

100.8.3 The classification of any wastewater collection system may be changed at the discretion of the Division for changes in any condition or circumstances on which the classification was predicated.

100.9 QUALIFICATIONS FOR CERTIFICATION OF OPERATORS

100.9.1 Continuity of Certification

- (a) Operators certified under the system of classification and certification in place prior to January 30, 2001, including distribution and collection system operators who passed the voluntary examination administered by the Colorado Water Distribution and Wastewater Collection Certification Council, shall be deemed compliant with this provision and fully capable of operating facilities as described herein.
- (b) Operators holding Class 3 water distribution or wastewater collection certifications issued prior to January 1, 2008 shall be deemed to have met the requirements for the Class 4 certification and shall be issued Class 4 certifications.

100.9.2 Basic Requirements for Certification by Examination

- (a) Applicants shall be evaluated by the Board or its designee as to education, experience, and knowledge related to the classification level for which the applicant seeks to be certified.
- (b) An applicant must pass a validated examination designated for the ~~type-category~~ and level of facility for which application is being made with a minimum passing score of 70 percent.
- (c) To qualify to sit for an examination, an applicant must meet the minimum education requirements, the minimum experience or cross-experience requirements, and the prior certification requirements as set forth in section 100.9.8.

- ~~(d) Class T certification is only valid for operating facilities that meet all of the following criteria:~~
- ~~(i) are classified as transient non-community public water systems;~~
 - ~~(ii) that draw water from ground water sources not under the direct influence of surface water;~~
 - ~~(iii) serve fewer than 100 individuals per day;~~
 - ~~(iv) utilize treatment consisting only of non-gaseous chlorine disinfection; and~~
 - ~~(v) would be classified as a Class "D" water treatment facility and as a Class "1" water distribution system under the provisions of this regulation.~~
- ~~(e) Class S Water certification is only valid for operating facilities that meet all of the following criteria:~~
- ~~(i) serve no more than 3,300 persons; and~~
 - ~~(ii) would be classified as a Class "D" water treatment facility and as a Class "1" water distribution system under the provisions of this regulation.~~
- ~~(f) Class S Wastewater certification is only valid for operating facilities that meet all of the following criteria:~~
- ~~(i) serve no more than 3, 300 persons; and~~
 - ~~(ii) would be classified as a Class "D" wastewater treatment facility and as a Class "1" wastewater collection system under the provisions of this regulation.~~

100.9.3 Minimum Educational Requirements for Certification by Examination

- (a) Applicants must have a high school diploma or a general equivalency diploma (GED), except as provided in section 100.9.3(c)
- (b) Experience and relevant training may substitute for a high school diploma or GED. Applicants substituting experience and relevant training for the high school diploma or GED shall:
 - (i) have an additional six (6) months of qualifying experience; and
 - (ii) demonstrate the completion of 1.0 training units in a course approved as a substitute for entry-level experience requirements.
- (c) Applicants for certification as Class D, Class 1, Class S, or Class T operators of water or wastewater facilities who are enrolled in the last semester of Board approved courses or programs which are specifically designed to prepare secondary students to operate water or wastewater facilities may be approved to take the examination before earning a high school diploma.

422 (i) Such an approval shall be based on a case-by-case determination that
423 such courses or programs are directly and specifically relevant to the
424 operation of water and wastewater facilities.

425 (ii) After passing the examination, the certificate will be issued upon
426 submitting proof of the high school diploma to the Board or its designee.

427 100.9.4 Experience Determinations for Certification by Examination

428 (a) No more than one year of experience will be credited for employment/activities
429 during any one calendar year.

430 (b) For water or wastewater facilities that require less than a full time operator for
431 proper operation, the experience of an operator of such a facility who works less
432 than half time will be counted as half-time experience; the experience of an
433 operator of such a facility who works half-time or more will be counted as full-time
434 experience.

435 (c) The aggregate time spent operating multiple facilities shall be considered in any
436 determination of whether to credit full-time experience or half-time experience.

437 (d) Experience obtained in the operation of a seasonal water or wastewater facility
438 will be credited only for that portion of the year during which the facility is in
439 operation.

440 (e) Except as described in section 100.9.9 below, the certification examination
441 application deadline is the experience cut-off date in determining whether an
442 operator has the required experience to take a certification examination at a
443 particular level.

444 (f) To meet the experience requirement to test for a particular level of certification,
445 the experience relied upon does not have to be at the level of the examination for
446 which application is being made.

447 100.9.5 Evaluation of Experience. For purposes of this section, domestic and industrial
448 wastewater treatment facility experience shall be considered interchangeable. In
449 evaluating experience of operators the Board or its designee will be guided by:

450 (a) whether and to what degree the experience required technical knowledge of the
451 operation of a water or wastewater facility;

452 (b) whether and to what degree the experience was actual on-site operating
453 experience with the daily operational aspects of a facility that could affect water
454 quality or quantity; and

455 (c) whether or not the experience included the responsible charge of a water or
456 wastewater facility.

457 100.9.6 Once specific experience or relevant training is credited toward the satisfaction of either
458 the experience or education requirements of this section, that same experience and/or
459 training may not be further credited to meet other requirements of this section.

460 100.9.7 Prior Certification Requirements. To qualify to sit for an examination, an applicant must
461 hold a certification for the same certification category (water treatment facility, domestic

or industrial wastewater treatment facility, distribution system or collection system) and in the class immediately below the class for which application is being made. Prior certification requirements are shown in the table below.

100.9.8 Table - Prior Certification and Experience Requirements

Certification Class	Prior Certification Required ¹	Minimum Experience Required
Class T	None	No minimum experience requirement
Class S, Class D, or Class 1	None	1 Month
Class C	Class D or Class S	2 Years
Class 2	Class 1 or Class S	2 Years
Class B	Class C	3 Years
Class 3	Class 2	3 Years
Class A	Class B	4 Years
Class 4	Class 3	4 Years

¹ Prior certification must be for the same certification category as that of the examination being applied for.

100.9.9 Special Rules for Satisfying the Minimum Experience Requirements for Class D, Class 1, Class S and Class T Certifications:

- (a) Applicants for certification as Class D, Class1, Class S, or Class T operators of water or wastewater facilities may be approved to take the examination before accruing the necessary experience for the issuance of a certificate.
- (b) After passing the examination, the certificate will be issued upon showing completion of satisfactory experience to the Board or its designee.
- (c) The required experience ~~must be obtained either may be accrued~~ under the supervision of a certified operator ~~or, through on the job training with a certified operator, or through an apprenticeship with a contract operator who is certified.~~ The required experience may also be accrued through the successful completion of an approved training course or course of study, ~~approved by the Board or its designee, which is designed to prepare the examinee to operate Class D or Class 1 facilities.~~
- (d) Any education courses used to satisfy the basic experience requirement for a Class D, Class 1, Class S, or Class T certification may not be used to satisfy the certification renewal requirements for that same certification.

100.10 APPLICATION FOR CERTIFICATION

486 100.10.1 A person desiring to be certified to operate a water or wastewater facility shall file an
487 application with the Board or its designee.

488 100.10.2 The Board shall designate the number of examination cycles during each calendar year.

489 100.10.3 For each examination cycle, the Board or its designee shall specify an application
490 deadline.

491 100.10.4 All applications for certification examinations shall be made on forms provided by the
492 Board or its designee.

493 100.10.5 Completed application materials and fees must be received by the Board or its designee
494 on or before the application deadline for each examination cycle.

495 100.10.6 While an applicant may apply for more than one examination during a cycle, that
496 applicant may apply for only one level of certification for each certification category (water
497 treatment facility, domestic or industrial wastewater treatment facility, distribution system
498 or collection system).

499 100.10.7 The applicant must specify examination type-category (i.e. water, domestic or industrial
500 wastewater, distribution, collection, small-class S water-system, or small-class S
501 wastewater-system, or class T), level of certification sought, examination date, and
502 testing location and may only take the specified examination once during each
503 examination cycle.

504 100.10.8 The Board or its designee shall review applications and supporting documents,
505 determine the eligibility of applicants to sit for the examination, and notify the applicants
506 of their status. Any application disapproval notification shall specify the reason(s) the
507 application does not meet the minimum requirements.

508 100.10.9 If an application is disapproved, the applicant may request a re-review of the
509 application, including consideration of any clarifying information that the applicant may
510 choose to submit regarding the identified basis for disapproval.

511 (a) Any such request for re-review must be received by the Board or its designee
512 within two weeks of the date of the disapproval notification letter.

513 (b) All additional factual information supporting the application must be received with
514 the re-review request.

515 100.10.10 If an application is still disapproved after re-review, the applicant may appeal this
516 determination to the Board.

517 (a) Any such appeal must be received in the Board's office within two weeks of the
518 date of the second disapproval notification letter.

519 (b) No new factual information will be accepted during the Board appeal process,
520 except for good cause shown.

521 **100.11 EXAMINATIONS**

522 100.11.1 The Board or its designee shall oversee the preparation and administration of validated
523 examinations to be used in determining whether or not the applicant has the necessary
524 skills, knowledge, ability and judgment appropriate for the level of certification sought.

525 100.11.2 Examinations shall be held at places and times set by the Board or its designee.
 526 Advance announcements of the date and locations of examinations shall be made by the
 527 Board or its designee.

528 100.11.3 All examinations shall be written or administered electronically, except in such cases as
 529 the Board or its designee decide, on a case-by-case basis, represent proper exceptions
 530 to this requirement.

531 100.11.4 All examinations will be graded by the Board or its designee, and the applicants shall be
 532 notified of the results.

533 100.11.5 Examinees shall be provided an analysis of their examination performance indicating
 534 the level of knowledge demonstrated for each topic tested.

535 100.11.6 Separate validated examinations will be prepared for each ~~type-category~~ and level of
 536 certification available. The appropriate range and balance of examination material shall
 537 be developed from formal job analyses and the need-to-know criteria resulting from such
 538 analyses.

539 100.11.7 Applicants who fail an examination may retest during subsequent, regularly scheduled
 540 examination cycles upon complying with all applicable application procedures including
 541 the payment of appropriate fees.

542 100.11.8 Any form of cheating on the part of an applicant will invalidate the results of his or her
 543 examination and may result in the applicant being barred from taking examinations for a
 544 period of 1 to 5 years, as determined by the Board following a hearing pursuant to Article
 545 4 of Title 24, C.R.S.

546 **100.12 EDUCATION AND CROSS EXPERIENCE SUBSTITUTED FOR EXPERIENCE**
 547 **REQUIREMENTS**

548 100.12.1 Substitution of Education for Experience Requirements

549 (a) Post-secondary education may also be substituted for the experience
 550 requirements of section 100.9 on the basis of successful completion of formal
 551 academic credit hours, as approved by the Board or its designee in accordance
 552 with section 100.12.2, for all or a portion of an academic year. For education
 553 substitution for experience, academic credit hours shall be calculated as follows:

554 (i) 15 semester hours = ½ academic year = 6 months experience; 15
 555 quarter hours = 1/3 academic year = 4 months experience;

556 (ii) Training units: 300 contact hours or 30 training units = 15 quarter hours =
 557 4 months experience;

558 (iii) thirty (30) semester hours and/or forty-five (45) quarter hours shall
 559 constitute one (1) year's formal education and may be substituted for one
 560 (1) year of experience.

561 (b) Consideration of Field(s) of Study

562 (i) Credit for up to fifty percent (50%) of the applicable experience
 563 requirement of section 100.9 may be granted for satisfactorily completing
 564 structured programs of study in a degree or certificate granting

565 educational institution or equivalent for technically oriented programs
566 which the Board or its designee has determined are directly relevant to
567 the operation of water and wastewater facilities, including but not limited to
568 to post high school education in the environmental control field,
569 engineering or related science. Experience credit shall be granted based
570 upon the number of academic years required to complete the program, in
571 accordance with subsection 100.12.1(a).

572 (ii) Credit for up to twenty-five (25%) of the applicable experience
573 requirement of section 100.9 may be granted for satisfactorily completing
574 structured programs of study in a degree granting educational institution
575 or equivalent, regardless of field of study. Experience credit shall be
576 granted based upon the number of academic years required to complete
577 the program, in accordance with subsection 100.12.1(a).

578 (c) In instances where an approved degree or certificate program has not been
579 completed, credit for up to fifty percent (50%) of the applicable experience
580 requirement of section 100.9 may be granted for the completion of individual
581 technically oriented courses as approved by the Board or its designee as
582 relevant to the operation of water and wastewater facilities, including but not
583 limited to post high school education in the environmental control field,
584 engineering or related science, in accordance with subsection 100.12.1(a).

585 (d) At least fifty percent (50%) of any experience requirement of section 100.9 of this
586 regulation shall be met by actual on-site operating experience in a water or
587 wastewater facility, except that Class D, Class 1, and Class S applicants may
588 satisfy the experience requirements exclusively with formal academic education
589 credits or training units, in accordance with subsection 100.9.

590 100.12.2 Approval of Training, Educational Courses, and Institutions

591 (a) The Board or its designee may approve, for purposes of substituting education
592 for experience, courses or programs which are specifically designed to prepare
593 secondary students to operate water or wastewater facilities. Such an approval
594 shall be based on a case-by-case determination that such courses or programs
595 are directly and specifically relevant to the operation of water and wastewater
596 facilities.

597 (b) Approval of technically-oriented courses or programs, for purposes of substituting
598 education for experience, shall be determined by the Board or its designee based
599 on a determination that such courses or programs are directly relevant to the
600 operation of water and wastewater facilities. Such courses and programs may
601 include, but are not limited to, post-secondary education in the environmental
602 control field, engineering, microbiology, chemistry, or other related science.

603 (c) Approval of educational institutions for purposes of substituting education for
604 experience shall be determined by the Board or its designee based on
605 accreditation by recognized regional associations for such institutions in the
606 United States. For educational institutions outside the United States, the
607 applicant shall be required to establish to the satisfaction of the Board or its
608 designee the equivalency and suitability of the courses of study claimed for
609 credit.

610 (d) Other educational programs, including but not limited to, specialized operator
611 training courses, seminars, workshops, correspondence or computer courses,

612 and technical conferences, may be credited toward education for purposes of
613 substitution for experience as approved by the Board or its designee. Such
614 programs will receive credit in training units on the following basis:

615 (i) Ten (10) contact hours shall be required to equal one training unit. A
616 contact hour means a classroom or supervised hour of attendance or
617 hour of participation, recognized by the Board as a training unit,
618 successfully completed by an applicant.

619 (ii) Three (3) training units shall equal one semester credit hour or two
620 training units shall equal one quarter credit hour for purposes of
621 equivalency.

622 100.12.3 Substitution of Cross-Experience for Experience Requirements

623 (a) Cross-experience may be substituted for the experience requirements of section
624 100.9 for certification as a Class C, Class B, or Class A water treatment facility
625 operator, domestic or industrial wastewater treatment facility operator; or for a
626 Class 2, Class 3, or Class 4 water distribution or wastewater collection system
627 operator, except that at least fifty percent (50%) of any experience requirement of
628 section 100.9 shall be met by actual on-site operating experience in the specific
629 certification category, water or wastewater, for which application is being made.

630 (b) For the purpose of this section, "cross-experience" means that:

631 (i) qualifying experience as an operator in a water treatment facility may be
632 substituted for up to fifty percent (50%) of the experience requirement for
633 certification as an operator of a wastewater treatment facility;

634 (ii) qualifying experience as an operator in a wastewater treatment facility
635 may be substituted for up to fifty percent (50%) of the experience
636 requirement for certification as an operator of a water treatment facility;

637 (iii) qualifying experience as an operator in a water distribution system may
638 be substituted for up to fifty percent (50%) of the experience requirement
639 for certification as an operator of a wastewater collection system; or

640 (iv) qualifying experience as an operator in a wastewater collection system
641 may be substituted for up to fifty percent (50%) of the experience
642 requirement for certification as an operator of a water distribution system.

643 **100.13 CERTIFICATES**

644 100.13.1 New Certificates

645 (a) Upon written notification that they have passed the certification examination and
646 are eligible for certification, successful examinees must pay the required
647 administration and applicable late fees as listed in section 100.19.2 and complete
648 the following, if required:

649 (i) demonstrate fulfillment of the experience requirements for Class D,
650 Class 1, Class S and Class T certification pursuant to section 100.9.

651 (ii) submit a copy of a high school diploma pursuant to section 100.9.3(c).

- 652 (b) Upon satisfactory fulfillment of the requirements of section 100.13.1, the Board or
653 its designee shall award to the applicant a certificate designating the appropriate
654 certification level.
- 655 (c) Newly awarded operator certificates shall be valid for three (3) years from the
656 date of the certification eligibility notification letter unless revoked or suspended
657 as provided in section 100.23 of these regulations.
- 658 (d) An applicant shall complete the certification process by paying the administration
659 and applicable late fees as listed in section 100.19.2 within three (3) years from
660 the date of the certification eligibility notification letter.

661 100.13.2 Renewal of Certificates

- 662 (a) Operators must submit a written application for renewal to the Board or its
663 designee prior to the expiration date of the certificate.
- 664 (b) Renewed certificates shall be valid for three (3) years from the date of expiration
665 of the prior certificate, not from the issue date of the renewed certificate.
- 666 (c) Renewal applications must demonstrate that the operator satisfies the
667 requirements of this regulation including meeting the renewal training unit
668 requirements stated in section 100.14.
- 669 (d) The Board or its designee shall provide all application forms for renewal of
670 certificates.
- 671 (e) 100.13(e) Renewal Process for Operators Absent Due to Military Service
- 672 (i) "Military service" means service in the uniformed services, as defined in
673 the Uniformed Services Employment and Reemployment Rights Act
674 (USERRA), 38 U.S.C. §§ 4301-4335, the performance of duty on a
675 voluntary or involuntary basis in a uniformed service under competent
676 authority and includes active duty, active duty for training, initial active
677 duty for training, inactive duty training, full-time National Guard duty, a
678 period for which a person is absent from a position of employment for the
679 purpose of an examination to determine the fitness of the person to any
680 such duty, and a period for which a person is absent from employment
681 for the purpose of performing funeral honors duty as authorized by
682 section 12503 of title 10 or section 115 of title 32.
- 683 (ii) During the period an operator is participating in military service, his or
684 her certification(s) shall be tolled relative to certification renewal and
685 training unit requirements. In other words, for every day an operator is in
686 military service, all certifications held by that operator will be put on hold
687 for purposes of meeting the renewal and training unit deadlines. In
688 addition to the number of days in service, an extra 90-day grace period
689 shall be afforded to operators upon return from military service for
690 purposes of meeting renewal and training unit deadlines. The Board or
691 its designee shall have the discretion to extend this grace period to
692 address extenuating circumstances on a case-by-case basis.
- 693 (iii) If the two-year renewal window for any certification expires while an
694 operator is in military service, the operator's certification(s) will not

become invalid during the period the operator is in service. Under this scenario, upon return from military service the operator will have the amount of time accrued while in military service, plus an additional 90 days to obtain the required training unit credits and to submit a renewal application. The operator's certification(s) will remain valid during that extended time period. In no case will the operator be subject to any late fees at the time of submitting a renewal application that is in conformance with section 100.13.2(e).

(iv) It is the operator's responsibility to alert the Board's designee(s) of intervening military service at the time of filing a renewal application. Such notification shall include the dates the operator was in "service in the uniformed services" in accordance with the USERRA definition. Operators will be expected to provide a signature swearing under the penalty of perjury to the veracity all statements regarding military service.

100.13.3 Expired Certificates

- (a) A certificate becomes invalid on its expiration date.
- (b) Following expiration of a certificate, the operator shall not represent that he or she holds a certificate in the class for which the certificate expired.
- (c) No operator of a water or wastewater facility shall operate a facility in reliance on an expired certificate.
- (d) An operator may apply for renewal for two years following expiration of the certificate. The Board or its designee will renew the certificate if the operator pays the renewal and applicable late fees, as listed in section 100.19.2(d), and satisfies all applicable renewal requirements.
- (e) Certificates which are renewed after their expiration date shall be valid for three years from the date of expiration of the prior certificate, not from the issue date of renewed certificate.

100.13.4 Revocation of Non-Renewed Certificates

- (a) Any certificate not renewed by the operator within two years of its expiration is automatically revoked.
- (b) Any operator whose certificate is revoked shall be treated as a new applicant for purposes of this regulation and must meet all the initial certification requirements, including passing the appropriate certification examination.

100.13.5 Certificates by Reciprocity

- (a) Certificates may be issued by the Board or its designee, without examination, on a case-by-case basis, to persons in a comparable classification who have met the following requirements:
 - (i) Passed an adequate, validated examination and who hold a valid certificate from another state, territory or possession of the United States, certifying entity, or other country provided the requirements for certification of operators under which the person's certificate was issued

736 do not conflict with the provisions of Article 9 of Title 25, C.R.S., and are
737 of a standard not lower than that specified by these regulations.

738 (ii) Obtained qualifying experience in the state, territory or possession of the
739 United States, or other country in which they hold a valid certificate.

740 (b) Upon written notification of approval by the Board for certification in Colorado,
741 applicants shall pay the administration and applicable late fees as listed in
742 section 100.19.2.

743 (c) Certificates by reciprocity shall be considered “new” certificates subject to all
744 requirements of sections 100.13.1 and 100.19.

745 **100.14 PROFESSIONAL DEVELOPMENT - TRAINING UNIT REQUIREMENTS FOR RENEWAL OF**
746 **CERTIFICATION**

747 100.14.1 In addition to the other requirements of this regulation, all ~~certified~~ operators holding a
748 certificate must earn the appropriate number of training units, as specified in this section,
749 before the operator’s certificate will be renewed.

750 (a) At least fifty percent (50%) of the training units for certification renewal must be
751 for courses approved for credit in the specific field of the certificate being
752 renewed.

753 (b) Up to fifty percent (50%) of the training units for certification renewal may come
754 from courses approved for credit in a field other than that of the certification being
755 renewed, including supplemental training courses.

756 (c) The maximum number of training units from a specific course that may be
757 credited toward the renewal of a single certification is the training unit equivalent
758 of the actual number of approved hours in the course.

759 (d) If applicable, the training units from one course may be applied toward the
760 renewal of more than one certification.

761 100.14.2 Table – Training Unit Requirements for Operator Certification Renewal

Operator Class	Training Unit Requirement
Class T	1.2 Training Units
Class D or Class 1	1.2 Training Units
Class S	1.8 Training Units
Class C or Class 2	1.8 Training Units
Class B or Class 3	2.4 Training Units
Class A or Class 4	3.0 Training Units

~~100.14.3 Ten contact hours shall be required to equal one training unit. A "contact hour" means a classroom or supervised hour of attendance or hour of participation recognized by the Board as a training unit in accordance with section 100.12.2.~~

100.14.4-3 All subject matter for which training units will be granted must be determined by the Board or its designee to be relevant and necessary to the successful operation of a water or wastewater facility.

(a) The Board or its designee shall approve as "core training" courses with topics that are directly applicable to aspects of water and wastewater facility operations that may affect public health or the environment, or the need to maintain compliance with established requirements. Training units from such courses may be used to satisfy the training units requirements for the renewal of an operator's certification in accordance with section 100.14.1.

(b) Eligible "core training" topics may include the following subjects:

(i) operation and maintenance of facility mechanical systems, electrical equipment or hydraulics;

(ii) physical treatment, chemical treatment, biological treatment;

(iii) physical testing, chemical testing, biological testing, or disinfection;

(iv) regulatory compliance; or

(v) other relevant topics approved by the Board or its designee.

(c) The Board or its designee may approve as "supplemental training" any courses that are found to provide useful operator knowledge but are not directly related to water or wastewater facility operations. Training units from courses approved as "supplemental ~~training~~ training" may be used to satisfy the training unit requirements for renewal of an operator's certification in accordance with section 100.14.1.

100.14.5-4 Training units shall be awarded to ~~certified~~ operators holding a certificate for teaching a classroom course that has been approved by the Board or its designee. The training units awarded shall be double the training units approved for the course.

100.14.6-5 Institutions, seminar presenters, and others may seek approval of their training or educational courses or programs by application to the Board or its designee. Such an application must demonstrate that their proposed material, curricula, contact hour equivalency, and facilities meet the criteria established in section 100.12.2.

100.15 CERTIFIED OPERATOR DUTIES OF OPERATORS HOLDING A CERTIFICATE

100.15.1 In the performance of their duties, ~~certified~~ operators holding a certificate shall exercise a level of reasonable care and judgment consistent with the experience and training appropriate to their level of certification as defined in these regulations.

100.15.2 Process control and/or system integrity decisions with respect to drinking water quality or quantity that may affect the public health or the environment are reserved to certified

801 | operators or to another operator holding a certificate equal to or above the classification
802 | of the facility they are operating.

803 | 100.15.3 Process control and/or facility integrity decisions with respect to effluent quality or
804 | quantity that may affect the public health or the environment are reserved to certified
805 | operators or to another operator holding a certificate equal to or above the classification
806 | of the facility they are operating.

807 | 100.15.4 ~~Certified operators~~ Operators holding a certificate shall protect the public health and the
808 | environment by properly performing and/or supervising the activities pertinent to
809 | controlling the operation of a water or wastewater facility in accordance with a written
810 | operating plan as appropriate to their level of certification, including but not limited to the
811 | following:

812 | (a) controlling the selection of or flow from a source to a water or wastewater facility
813 | and controlling the selection of or flow from a water or wastewater facility to a
814 | receiving body or system;

815 | (b) controlling the processing of raw and/or treated and/or finished
816 | water/wastewater;

817 | (c) preparing and/or controlling chemical addition for water or wastewater treatment;

818 | (d) observing and taking necessary actions in response to variations in operating
819 | conditions;

820 | (e) interpreting meter and/or gauge readings and adjusting facility processes based
821 | on such interpretations;

822 | (f) operating valves and/or gates either manually or by remote control;

823 | (g) starting and/or stopping pumps;

824 | (h) maintaining logs and/or records; or

825 | (i) collecting and/or analyzing process control samples; ~~;~~

826 | ~~(j) — ensuring proper inspection and testing of new, modified, or repaired facilities~~
827 | ~~prior to placing or returning such facilities into service;~~

828 | ~~(k) — developing and implementing preventative maintenance programs and~~
829 | ~~performing routine maintenance functions for facilities; or~~

830 | ~~(l) — overseeing compliance with laws and regulations and reporting as appropriate to~~
831 | ~~facility owners and the Department.~~

832 | ~~100.15.6 Each certified operator shall provide to the Board or its designee his or her current~~
833 | ~~mailing address, telephone number, and email address (if available) and shall update this~~
834 | ~~information within 30 days of a change.~~

835 | 100.16 **CERTIFIED OPERATOR IN RESPONSIBLE CHARGE DUTIES**

836 100.16.1 The certified operator ~~in responsible charge~~ is designated by the owner of the water or
837 wastewater facility and has supervisory responsibility for the operation of the facility and
838 for the operational activities and functions of other facility operators.

839 100.16.2 The certified operator ~~in responsible charge~~ of a water or wastewater facility must hold a
840 valid certificate equal to or greater than the classification of the water or wastewater
841 facility he or she operates.

842 100.16.3 The certified operator ~~in responsible charge~~ shall protect the public health and the
843 environment in the conduct of his or her duties. These duties shall include the following:

844 (a) the management or administration of the operation of the water or wastewater
845 facility;

846 (b) the accountability for the proper operation and maintenance of the water or
847 wastewater facility for compliance with applicable regulations and/or permit
848 requirements, including monitoring and reporting requirements;

849 (c) the control of, supervision over, or active participation in the daily planning,
850 operation or maintenance of a water or wastewater facility;

851 (d) authority to make day-to-day process control and system integrity decisions on
852 the operation and maintenance of the water or wastewater facility;

853 (e) the availability to make decisions and initiate actions regarding the operation of
854 the water or wastewater facility in a timely manner;

855 (f) ensuring proper inspection and testing of new, modified, or repaired facilities
856 prior to placing or returning such facilities into service;

857 (g) developing and implementing preventative maintenance programs and
858 performing routine maintenance functions for facilities;

859 (h) overseeing compliance with laws and regulations and reporting as appropriate to
860 facility owners and the Department; and

861 (f) the performance of other functions of direct responsibility, ~~such as including~~ those
862 enumerated in section 100.15.

863 100.16.4 The certified operator of a water or wastewater facility may delegate tasks or activities to
864 other facility operators when delineated by a written operating plan.

865 (a) Such tasks may be performed by the facility operators even if the certified
866 operator is not on-site.

867 (b) The operating plan must be very clear in defining the limits of such tasks or
868 activities.

869 (i) The operating plan must be reviewed and updated, as needed, at least
870 once each calendar year by the certified operator.

871 (ii) The operating plan must be available to the facility owner and other
872 facility operators at all times. The operating plan must be available for
873 inspection by the Department upon request.

(c) Any operational activity beyond these limits requires the immediate and direct consultation with and participation of the certified operator or another operator holding a certificate equal to or above the classification of the facility they are operating.

(d) The certified operator remains accountable for the consequences of the performance of such tasks by other facility operators under his or her charge.

100.17 AUTHORIZATION FOR CONTINUED OPERATION OF WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS

100.17.1 Operators of water distribution and/or wastewater collection systems certified prior to January 30, 2001, under the voluntary program administered by the Colorado Water and Wastewater Collection Systems Certification Council, Inc., shall be considered compliant with the certification requirements of this provision. Upon expiration of current certificates issued under this voluntary program, all new and renewed certificates shall be valid for a period of three years. Such certification shall be renewable upon payment of appropriate fees and obtaining the required training units.

100.17.2 Existing operators of water distribution or wastewater collection systems as of January 30, 2001, whose responsibility includes making process control and/or system integrity decisions about water quality or quantity that may affect the public health or environment, may continue to operate the specific system in which they are currently employed for a period of two years from the issuance of an authorization for continued operation without meeting the certification requirements of this regulation, provided that they have the requisite minimum experience levels provided in section 100.9 and so long as the following requirements are satisfied:

(a) The owner of the existing water distribution or wastewater collection system applies to the Board or its designee for issuance of an authorization for such operator to continue operation without compliance with the otherwise applicable certification requirements of this regulation. The owner must submit such application to the Board or its designee within one year of January 30, 2001.

(b) Such an operator shall not operate any other system until he or she meets the initial certification requirements for that system and obtains a certificate appropriate for that system.

(c) Authorization for continued system operation under this provision is non-transferable, applies only to the specific system and operator and does not authorize operation of the system by any other operator.

(d) Within two (2) years from the issuance of an authorization for continued operation under this provision, an operator must obtain a certificate, restricted to the operation of the specific system, by meeting all requirements for obtaining certificate renewal including payment of fees, acquiring the minimum training units, and demonstrating to the Board or its designee all requisite skills, knowledge, ability and judgment for the type of system.

(e) If the classification of a facility or system changes to a higher level, the authorization to continue operation under this provision expires, and is no longer valid unless the classification change occurs without any significant physical change in the system as determined by the Board or its designee.

918 (f) Any operator authorized to continue operation under this provision who chooses
919 to work for a different facility or system must meet all the initial certification
920 requirements for that facility or system, including obtaining a certificate
921 appropriate to that facility or system, passage of a validated written examination,
922 and satisfaction of the minimum experience requirements of this regulation.

923 **100.18 RESPONSIBILITIES OF WATER AND WASTEWATER FACILITY OWNERS**

924 100.18.1 Supervision by a Certified Operator ~~in Responsible Charge~~

925 (a) No owner of a water or wastewater facility shall allow the facility to be operated
926 without the direct supervision of ~~an~~ certified operator ~~in responsible charge~~
927 ~~certified in a classification equivalent to or higher than the classification of the~~
928 ~~facility as specified in sections 100.4 through 100.8.~~

929 (b) For purposes of this regulation, “direct supervision” means that the certified
930 operator ~~in responsible charge~~ has supervisory responsibility and authority with
931 respect to the operation of the water or wastewater facility and for the activities
932 and functions of other facility operators.

933 (c) Owners shall ensure that their agreement with the certified operator ~~in~~
934 ~~responsible charge~~ is sufficiently detailed and formal to reflect all the duties as
935 outlined in section 100.16.

936 (d) Contracts for limited services do not fulfill the owner’s obligation, under section
937 100.18.1(a), to place the facility under the supervision of ~~an~~ appropriately
938 certified operator ~~in responsible charge~~. Contracts for limited services, such as
939 compliance sampling, do not rise to the level of a contract for ~~an~~ certified
940 operator ~~in responsible charge~~.

941 100.18.2 Decisions Reserved to Certified Operator ~~in Responsible Charge~~

942 Each owner of a water or wastewater facility shall ensure that all process control and/or
943 facility integrity decisions about water quality or quantity or wastewater effluent quality or
944 quantity that may affect public health or the environment are made by either ~~an~~ certified
945 operator ~~in responsible charge~~ or by another ~~certified~~ operator holding a certificate equal
946 to or above the classification of the facility they are operating in accordance with the
947 facility’s written operating plan.

948 100.18.3 Certified Operator Availability

949 (a) Each owner of a water or wastewater facility shall ensure that a designated
950 certified operator, or another operator holding a certificate equal to ~~certified at~~ or
951 above the classification of the facility, is available whenever the facility is in
952 operation.

953 (b) For purposes of this regulation, “available” means ~~that the designated certified~~
954 ~~operator must~~ either ~~be~~ on-site or ~~must be~~ able to be contacted as needed to
955 make decisions and to initiate appropriate actions in a timely manner.

956 100.18.4 Reporting Requirement

(a) Each owner of a water or wastewater facility shall submit in writing to the Division, no later than thirty (30) days following the date the facility is initially placed on-line and thereafter, no later than thirty (30) days after changes to any of the following information:

- (a) name, mailing address, phone number, and email address (if available) of the facility representative providing the information;
- (b) name, mailing address, phone number, email address (if available) and the classification and expiration of certification of all ~~operator(s) in responsible charge~~ certified operators employed by the owner;
- (c) identification of the facility or facilities for which each certified operator ~~in responsible charge~~ employed or contracted by the owner has responsibility; or
- (d) the Public Water System Identification (PWSID) number, ~~and the Colorado Discharge Permit system (CDPS) permit number, or general permit~~ certification number for all facilities listed.

100.18.5 Certified Operator ~~in Responsible Charge~~ Certification Requirements

- (a) Each water and wastewater facility shall have an certified operator ~~in responsible charge~~ certified as shown in the following table:

- (b) Table – Criteria for Certified Operator ~~in Responsible Charge~~

<u>Facility or System Classification</u>	<u>Certified Operator Minimum Required Certification of Operator(s) in Responsible Charge Levels</u>
<u>Water Systems</u>	
Water Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, D, S ¹ or T ²
Water Distribution	
4	4
3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S ¹
<u>Domestic Wastewater Systems</u>	

Wastewater Treatment	
A	A
B	A or B
C	A, B, or C
D	A, B, C, D, or S ³
Wastewater Collection	
4	4
3	4 or 3
2	4, 3 or 2
1	4, 3, 2, 1, or S ³
<u>Industrial Wastewater Systems</u>	
A	A
B	A or B
C	A, B, or C
D	A, B, C, or D, or S ³

¹ Applicable only in accordance with section 100.9-2(e)18.5(d)

² Applicable only in accordance with section 100.9-2(d)18.5(c)

³ Applicable only in accordance with section 100.9-2(f)18.5(e)

(c) Class T certification is only valid for operating facilities that meet all of the following criteria:

(i) are classified as transient non-community public water systems;

(ii) that draw water from ground water sources not under the direct influence of surface water;

(iii) serve fewer than 100 individuals per day;

(iv) utilize treatment consisting only of non-gaseous chlorine disinfection; and

(v) would be classified as a Class "D" water treatment facility and as a Class "1" water distribution system under the provisions of this regulation.

(d) Class S Water certification is only valid for operating facilities that meet all of the following criteria:

(i) serve no more than 3,300 persons; and

989 (ii) would be classified as a Class "D" water treatment facility and as a Class
 990 "1" water distribution system under the provisions of this regulation.

991 (e) Class S Wastewater certification is only valid for operating facilities that meet all
 992 of the following criteria:

993 (i) serve no more than 3,300 persons; and

994 (ii) would be classified as a Class "D" wastewater treatment facility and as a
 995 Class "1" wastewater collection system under the provisions of this
 996 regulation.

997 100.18.6 The Division shall investigate any instances of possible violations of the requirements of
 998 section 100.18 of this regulation by any owner of a water or wastewater facility. The
 999 Division shall enforce compliance with these requirements in accordance with the
 1000 procedures in sections 25-9-110(3), (4), (5), and (6), C.R.S.

1001 **100.19 FEES**

1002 100.19.1 Application fees for certification, renewal of certification, and issuance of a certificate
 1003 upon a Board finding of reciprocity shall be \$15, and shall be nonrefundable.

1004 100.19.2 Program fees shall consist of the following.

1005 (a) Examination fees in the amount of \$45.00 will be charged for each examination
 1006 the applicant signs up to take. Examination fees are based on the cost of
 1007 preparing, administering, and scoring the certification examination.

1008 (b) An additional fee of \$35.00 per examination will be charged applicants who
 1009 choose to take certification examinations electronically. This fee is based upon
 1010 the added cost to the program of making electronic testing available.

1011 (c) Administration fees will be charged upon issuance of all new and renewal
 1012 certifications and will be based on the cost of administering the operator
 1013 certification program. Administration fees shall be:

1014 (i) \$55.00 for each new certification by examination; and

1015 (ii) \$70.00 for each renewal certification and each new certification by
 1016 reciprocity.

1017 (iii) For all new and renewed certifications, a standard 6 x 9 inch certificate is
 1018 available at no additional cost. A 9 x 11 inch certificate may be
 1019 requested by the operator for a \$5.00 fee.

1020 (d) There shall be a \$20.00 fee to cover the cost of replacing certification
 1021 documentation.

1022 (e) There shall be a \$50.00 late fee, in addition to the regular administration fee, for
 1023 issuance of certificates for new certification or certification by reciprocity
 1024 requested sixty-one (61) days or more after the date of the letter notifying the
 1025 applicant of eligibility to receive certification.

- 1026 (f) There shall be a \$50.00 late fee, in addition to the regular administration fee, for
1027 the renewal of any certification for which the renewal application is submitted
1028 after the expiration date of the certificate being renewed.
- 1029 (g) Training unit approval fees shall be \$50.00 for each course submitted for review,
1030 except that:
- 1031 (i) Accredited or equivalent educational institutions as referenced in
1032 subsection 100.12 shall not be required to submit courses for review in
1033 order for such courses to be used to satisfy training unit requirements; if
1034 such institutions choose to submit courses for review, the \$50.00 fee will
1035 apply and the applicable courses will be posted along with other
1036 approved courses;
- 1037 (ii) An individual attending a course that has not been approved for training
1038 units may apply for training unit credit for that course for a fee of \$25.00,
1039 provided that the course will then be approved only for the individual
1040 operator requesting approval; and
- 1041 (iii) The \$50.00 fee may be waived by the Board or its designee on a case-
1042 by-case basis upon a determination that:
- 1043 (A) The course is offered for open enrollment at no cost to those
1044 taking the course and with no compensation to the course
1045 sponsor;
- 1046 (B) Payment of the fee would constitute a financial hardship for the
1047 course sponsor; and
- 1048 (C) In the absence of the fee waiver, it is unlikely that this training
1049 opportunity would be available to operators.

1050 **100.20 DISCIPLINARY PROCEEDINGS**

- 1051 100.20.1 The Board may reprimand a ~~n certified~~ operator holding a certificate, and/or suspend or
1052 revoke the certificate of any ~~certified~~ operator holding a certificate who violates the
1053 requirements of this regulation, including, but not limited to the following:
- 1054 (a) failing to exercise reasonable care and judgment consistent with the operator's
1055 level of certification and degree of responsibility for the operation of a water or
1056 wastewater facility;
- 1057 (b) failing to properly perform and/or supervise activities pertinent to controlling the
1058 operation of a water or wastewater facility, including, but not limited to the tasks
1059 described in section 100.15 of this regulation;
- 1060 (c) willfully or negligently violating, causing, or allowing the violation of this
1061 regulation, 5 CCR 1003-2; the Colorado Primary Drinking Water Regulations, 5
1062 CCR 1003-1; the Colorado Discharge Permit System Regulation, 5 CCR 1002-
1063 61, or ~~the a~~ discharge permits issued ~~pursuant to 5 CCR 1003-61; thereunder; or~~
1064 any other relevant regulations.
- 1065 (d) submitting false or misleading information on any document provided to the
1066 Department, Division, Board, or designee of the Board;

- 1067 (e) using fraud or deception in the course of employment as an operator;
- 1068 (f) failing to conform with minimum standards of performance of an operator's duty;
- 1069 (g) engaging in dishonest conduct during an examination;
- 1070 (h) obtaining a certificate through fraud, deceit, or the submission of materially
1071 inaccurate application information; ~~or~~
- 1072 (i) representing oneself as holding a valid operator's certificate after the expiration,
1073 suspension, or revocation of the certificate; ~~or~~
- 1074 (j) place holder for language regarding unprofessional behavior/failing to adhere to
1075 the Colorado code of conduct for certified water professionals.
- 1076 100.20.2 The Board may reprimand an ~~certified~~ operator ~~in responsible charge~~, and/or suspend
1077 or revoke the certificate of any certified operator ~~in responsible charge~~, who:
- 1078 (a) fails to meet the requirements of an ~~certified~~ operator ~~in responsible charge~~ as
1079 defined in section 100.~~47-16~~ of this regulation; and/or
- 1080 (b) willfully or negligently causes, instructs, or allows any other person or operator
1081 under his or her charge, direction, or supervision to act in a manner inconsistent
1082 with an ~~certified~~ operator's duties and obligations as described in section 100.16
1083 or other relevant parts of this regulation, or to act in a manner inconsistent with
1084 the Colorado Primary Drinking Water Regulations, 5 CCR 1003-1; the Colorado
1085 Discharge Permit System Regulations, 5 CCR 1002-61, or a discharge permit
1086 issued thereunder; ~~or~~ or any other relevant regulations.
- 1087 100.20.3 The Division shall investigate any instances of possible misconduct ~~by certified~~
1088 ~~operators or operators in responsible charge of water or wastewater facilities~~. The
1089 Division shall present the results of the investigation and its recommendations for any
1090 disciplinary action, including reprimand or suspension or revocation of a certificate, to the
1091 Board in accordance with section 24-4-105, C.R.S.
- 1092 100.20.4 Reprimand
- 1093 A reprimand is an official admonition for wrongdoing issued to an operator by the Board
1094 in the form of a letter, which includes the facts and circumstances leading to the
1095 reprimand, the statutory and regulatory provisions at-issue, and a warning of more
1096 serious consequences for future wrongdoings.
- 1097 100.20.5 Suspension
- 1098 (a) The Board may suspend a certificate for a period not to exceed three (3) years.
- 1099 (b) At the end of the suspension period, an operator may resume ~~the prior~~ duties ~~of~~
1100 ~~a certified operator~~ without being required to submit a new application for
1101 certification.
- 1102 (c) If an operator's certification is due for renewal during the period of suspension,
1103 the operator shall remain subject to the renewal deadline and shall renew the
1104 certification in a timely manner.

1105 (d) Certifications renewed during a suspension period shall be-come valid for a
 1106 period of three (3) years, effective on the ending date of the suspension period.

1107 100.20.6 Revocation

1108 (a) Following the revocation of a certificate, an operator may not apply for another
 1109 certification in the same classification category as that of the revoked certificate
 1110 for a period of three (3) years.

1111 (b) any operator whose certificate is revoked shall be treated as a new applicant for
 1112 purposes of this regulation and must meet all the initial certification requirements,
 1113 including passing the appropriate certification examination.

1114 100.20.7 Emergency Suspension or Revocation

1115 The Division may immediately suspend or revoke certifications where such immediate
 1116 action is necessary to protect the public health or the environment.

1117 100.20.8 Following the suspension or revocation of his or her certificate, an operator shall not
 1118 represent that he or she holds a certificate in the classification category for which the
 1119 certificate was suspended or revoked. No person shall operate a water or wastewater
 1120 facility in reliance on a suspended or revoked certificate.

1121 **100.21 HEARINGS AND APPEALS**

1122 100.21.1 Any water or wastewater facility owner who seeks a hearing in response to a Division
 1123 finding of a violation under section 100.18.1 or a Department assessment of a civil
 1124 penalty for such violation may request a hearing before the Board by submitting to the
 1125 Division, within thirty (30) days of notice of such finding or assessment a request
 1126 containing the following:

1127 (a) identification of the person(s) requesting the hearing and the subject matter of
 1128 the request;

1129 (b) the statutory and/or regulatory authority and factual basis for the request; and

1130 (c) the relief requested.

1131 100.21.2 Any certified operator, operator ~~in responsible charge~~holding a certificate, or other
 1132 person affected or aggrieved by a decision of the Board's designee or the Division may
 1133 request a hearing before the Board by submitting a request within thirty (30) days of
 1134 notice of such decision containing the following information:

1135 (a) identification of the person(s) requesting the hearing and the subject matter of
 1136 the request;

1137 (b) the statutory and/or regulatory authority and factual basis for the request; and

1138 (c) the relief requested.

1139 100.21.3 The Board shall grant any hearing request made pursuant to section 100.20.1 or
 1140 100.20.2 of this regulation and shall schedule and conduct an adjudicatory hearing in
 1141 accordance with section 24-4-105, C.R.S.

1142 100.22 - 29 RESERVED

1143 100.30 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; NOVEMBER,
1144 2000 RULEMAKING